- 2. The apparatus according to claim 1, wherein information regarding storage capacity for data storage on the disc is received, and on the basis of the received information, the scale factor n of recording density is determined.
- 3. The apparatus according to claim 2 comprising means for comparing the received information regarding storage capacity and a predetermined maximum storage capacity.
- 4. The apparatus according to claim 2, wherein if the predetermined maximum storage capacity is exceeded in a comparison of the received information regarding storage capacity and the maximum storage capacity, data indicating that recording is impossible is sent.
- 5. The apparatus according to claim 2, comprising means for comparing the received information regarding storage capacity and two predetermined maximum storage capacities.
- 6. The apparatus according to claim 2, wherein the received information regarding storage capacity is sent from an external computer.
- 7. The apparatus according to claim 1, wherein the n is greater than 1 and less than or equal to 1.2.
- 8. The apparatus according to claim 7, wherein if scale factor n that is determined on the basis of received information exceeds 1.2, a response is sent indicating that recording at that scale factor n is impossible.
- A disc recording apparatus for recording data to a disc comprising a recording address calculated as y = n(x-m) + m in the case where an offset address does not exist, where x is the absolute time address

generated on the basis of the pregroove formed on the disc, n is the scale factor of recording density, and m is the recording start address, and the recording address z calculated as z = y + p in the case where recording is performed with the offset address, where p is the offset address.

- 10. The apparatus according to claim 9, wherein information regarding storage capacity of the disc for recording data is received, and the scale factor n of recording density is determined on the basis of the received information.
- 11. The apparatus according to claim 10 comprising means for comparing the received information regarding storage capacity and a predetermined maximum recording capacity.
- 12. The apparatus according to claim 11, wherein if the predetermined maximum storage capacity is exceeded in a comparison of the received information regarding storage capacity and the maximum storage capacity, data indicating that recording is impossible is sent.
- 13. The apparatus according to claim 10, comprising means for comparing the received information regarding storage capacity and two predetermined maximum storage capacities.
- 14. The apparatus according to claim 10, wherein the received information regarding storage capacity is sent from an external computer.
- A disc recorded with data comprising data recorded with y as a recording address calculated from y = n(x-m) + m, where x is an absolute time address generated on the basis of a pregroove formed on the disc, n is a scale factor of recording density, and m is a recording start address.

Cond.

16. The disc according to claim 15, wherein the n is greater than 1 and less than or equal to 1.2.

Please add the following new claims:

A method for recording data comprising calculating a recording address y using y = n(x-m) + m, where x is an absolute time address generated on the basis of a pregroove formed on the disc, n is a scale factor of recording density, and m is a recording start address.

- 18. The method according to claim 17 further comprising determining the scale factor n of recording density on the basis of information regarding storage capacity for data storage on the disc received.
- 19. The method according to claim 18 further comprising comparing the received information regarding storage capacity and a predetermined maximum storage capacity.
- 20. The method according to claim 18 further comprising sending data indicating that recording is impossible if the predetermined maximum storage capacity is exceeded in a comparison of the received information regarding storage capacity and the maximum storage capacity.
- 21 The method according to claim 17 further comprising comparing the received information regarding storage capacity and two predetermined maximum storage capacities.
- The method according to claim 18 further comprising sending the received information regarding storage capacity from an external computer.